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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/600,382	06/20/2003	Brian J. Cragun	ROC920030127US1	8521

7590 03/09/2006  
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EXAMINER

PONIKIEWSKI, TOMASZ

ART UNIT PAPER NUMBER

2165

DATE MAILED: 03/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/600,382	<b>Applicant(s)</b> CRAGUN ET AL.	
	<b>Examiner</b> Tomasz Ponikiewski	<b>Art Unit</b> 2165	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>6/20/03</u> . | 6) <input type="checkbox"/> Other: ____.  |

### **DETAILED ACTION**

1. Claims 1-27 are pending.

### ***Claim Objections***

2. Claim 9 is objected to because of the following informalities: the recitation of "database table" in line 5 makes the examiner unsure if the it is equivalent to "index table" or it carries different functionality that has not been realized. Appropriate correction is required.
3. Claims 14, 21 and 22 recite "a database" and "a text document". The examiner does not see why database and text document are being referenced. There is no functionality to both recitations in light of the remaining language.
4. Claim 20 is objected to because of the following informalities: in line 4 the applicant recites "the index". The examiner believes that the applicant intended to recite "the index table" otherwise the recitation may refer to indexes or lead to no antecedent basis. Appropriate correction is required.

### ***Double Patenting***

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A

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nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 1-2 and 15 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-2 and 24 of copending Application No. 10/691287. Although the conflicting claims are not identical, they are not patentably distinct from each other because both applications use steps that are clearly similar. For example claim 1 of instant application states "creating an index for the first object", claim 1 of application 10/691287 states "creating a link to each sub-object". The last step in claim 1 of the instant application recites "creating a record containing the reference and the index for the first data object" while the last step of claim 1 of application 10/691287 recites "creating a record containing the reference and the link to each sub-object in the referenced portion". In effect both state the same thing.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 3-9 and 16-19 are dependent on independent claims 1 and 15 and therefore carry the same deficiency.

***Claim Rejections - 35 USC § 112***

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The examiner does not see how first object can be sub-object of second object while parameters of second object are included in parameters of the first object.

***Claim Rejections - 35 USC § 101***

9. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

10. Claims 1, 10, 15, and 20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 1, 10, 20 list computational steps in a program without tangible, useful, concrete result. The claims do not list any hardware (i.e. computer) tied to the method steps in order to store results or operate the steps of the claims therefore resulting in software only implementation.

Claim 15 is not limited to tangible embodiments. In view of Applicant's disclosure, specification page 7, paragraph 0028, the medium is not limited to tangible embodiments. As such, the claim is not limited to statutory subject matter and is therefore non-statutory.

To overcome this type of 101 rejection the claims need to be amended to include only the physical computer media and not a transmission media or other intangible or non-functional media. For this specification, signal-bearing media would be not statutory but storage media would be statutory.

11. The preamble of claim 20 recite "system for" which is intended use. To overcome this type of rejection, claim should be amended to recite definite functionality.

### ***Claim Rejections - 35 USC § 102***

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

13. Claims 1-4, 10, and 15-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Vogel (US Patent 6,665,581).

As per claim 1 Vogel is directed to a method comprising:

creating a reference to a first data object identified by a first plurality of identifying parameters (column 4, lines 13-16, wherein "reference" means "topography");

creating an index for the first data object, the index comprising one or more index values, each generated based on one or more of the first plurality of identifying parameters (column 2, lines 14-17, wherein "index" means "topical library");

and creating a record containing the reference and the index for the first data object (column 4, lines 18-19, wherein "record" means "final taxonomy").

As per claim 2 Vogel is directed to the reference comprises an annotation (column 4, lines 13-16, wherein "annotation" means "topography").

As per claim 3 Vogel is directed to a number of the index values is greater than a number of the first plurality of identifying parameters (column 2, lines 14-17, wherein "index" means "topical library").

As per claim 4 Vogel is directed to creating the index for the first data object comprises:

classifying the first data object based on the first plurality of identifying parameters (column 1, lines 36-38);

selecting a first mapping, from a plurality of mappings, based on the classification of the first data object (column 2, lines 17-23);

and converting the first plurality of identifying parameters to one or more of the index values, as specified in the first mapping (column 2, line 13-26).

As per claim 10 Vogel is directed to a method of managing annotations for a plurality of different type data objects, comprising:

receiving a set of parameters identifying a data object (column 3, lines 26-30);

selecting, based on the set of identifying parameters, a mapping from a plurality of mappings, each containing a different set of mapping functions (column 2, lines 17-23);

and creating an index for the data object by mapping the identifying parameters to columns in an index table, as specified by the mapping functions of the selected mapping (column 2, lines 14-17, wherein "index" means "topical library").

As per claim 15 Vogel is directed to a computer-readable medium containing a program which, when executed by a processor, performs operations comprising:

creating an annotation for a data object identified by a plurality of identifying parameters (column 4, lines 13-16, wherein "reference" means "topography");

creating an index for the data object, the index comprising one or more index values, each generated based on one or more of the plurality of identifying parameters (column 4, lines 13-16, wherein "reference" means "topography");



and creating an annotation record containing the annotation and the index for the data object (column 4, lines 18-19, wherein "record" means "final taxonomy").

As per claim 16 Vogel is directed to creating the index for the data object comprises:

selecting, based on the plurality of identifying parameters, a mapping from a plurality of mappings each containing a different set of mapping functions (column 2, lines 17-23);

and mapping the plurality of identifying parameters to columns of an index table containing the index, according to the mapping functions of the selected mapping (column 2, lines 14-17, wherein "index" means "topical library").

14. Claims 20-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Bays et al. (US Patent 6,519,603 B1).

As per claim 20 Bays et al. is directed to a system for managing annotations for different type data objects, comprising:

an annotation database for storing annotation records containing annotations for the different type data objects (column 2, lines 14-17; column 2, 30-32)

an index table for storing indexes for the different type data objects, the index having a plurality of columns, each corresponding to a different value of the indexes (column 8, lines 20-26);

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a plurality of mappings, each containing functions for mapping a set of identifying parameters for a different type of data object to one or more columns in the index table (column 2, lines 61-63)

and an executable annotation component configured to receive sets of parameters identifying data objects and, for each set of identifying parameters received, select one of the mappings based on the corresponding set of identifying parameters, and create an index for the first data object by mapping the first set of identifying parameters to columns in the index table, as specified by the mapping functions of the selected mapping (column 3, lines 16-23).

As per claim 21 Bays et al. is directed to at least one of the mappings comprises mapping functions for mapping parameters identifying data objects associated with a database to the index table columns (column 2, lines 52-53, wherein the “parameters” means labels).

As per claim 22 Bays et al. is directed to at least one of the mappings comprises mapping functions for mapping parameters identifying data objects associated with a text document to the index table columns (column 2, lines 52-53, wherein the “parameters” means labels).

As per claim 23 Bays et al. is directed to the annotation component is further configured to:

receive a request for an indication of annotated data objects contained within a document identified by a set of parameters (column 3, lines 48-50);

select one of the mappings based on the set of parameters identifying the document (column 3, lines 41-42);

create an index for the document by mapping the set of parameters identifying the document to columns in the index table as specified by the mapping functions of the selected mapping (column 8, lines 20-26);

search the index table for indexes matching the index created for the document (column 3, lines 61-64, wherein "index" means "pointer information");

convert each index matching the index created for the document, if any, to a set of parameters identifying a corresponding annotated data object ("if any" implies that may not be any therefore it does not have to be covered by any reference);

and return each set of parameters identifying a corresponding data object (column 4, lines 41-43).

As per claim 24 Bays et al. is directed to the annotation component is further configured to:

receive a request for an indication of annotations associated with a specified data object identified by a set of parameters (column 3, lines 48-50);

select one of the mappings based on the set of parameters identifying the specified data object (column 3, lines 41-42);

create an index for the specified data object by mapping the set of parameters identifying the specified data object to columns in the index table as specified by the mapping functions of the selected mapping (column 8, lines 20-26);

retrieve annotations, if any, for the specified data object, based on the index for the specified data object ("if any" implies that may not be any therefore it does not have to be covered by reference);

and return the annotations (column 4, lines 41-43).

As per claim 25 Bays et al. is directed to retrieving annotations for the specified object comprises:

determining if any indexes in the index table match the index created for the specified data object (column 4, lines 3-7);

and if so, retrieving one or more annotations for the specified data object from the annotation database (column 4, lines 3-7).

As per claim 26 Bays et al. is directed to the annotation component is configured to retrieve annotations for sub-objects of the specified data object (column 4, lines 18-25).

As per claim 27 Bays et al. is directed to the annotation component is further configured to:

receive a request for data objects having annotations satisfying one or more specified conditions (column 3, lines 48-50);

search the annotation database for annotations satisfying the one or more specified conditions (column 3, lines 61-63);

obtain indexes for data objects associated with annotations, if any, satisfying the one or more specified conditions (column 2, lines 34-37);

convert each of the indexes obtained to a set of parameters identifying the associated data object (column 4, lines 41-43);

and return the annotations satisfying the one or more specified conditions and the sets of parameters identifying the associated data objects(column 3, lines 61-63).

### ***Claim Rejections - 35 USC § 103***

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claims 5-9 are rejected under 35 U.S.C. 103(a) as being obvious over Vogel (US Patent 6,665,581).

As per claim 5 Vogel is directed to a further comprising:

creating a reference to a data object identified by a plurality of identifying parameters (Vogel, column 4, lines 13-16, wherein “reference” means “topography”);

classifying the data object based on the plurality of identifying parameters (Vogel, column 1, lines 36-38);

selecting a mapping, from the plurality of mappings, based on the classification of the data object (Vogel, column 2, lines 17-23);

creating an index for the data object by converting the plurality of identifying parameters to one or more index values, as specified in the mapping (Vogel, column 2, lines 14-17, wherein “index” means “topical library”);

and creating a record containing the reference to the data object and the index for the data object (Vogel, column 4, lines 18-19, wherein “record” means “final taxonomy”).

Vogel does not teach the use of above steps for second object. However Vogel does teach the use of above steps for an object.

It would have been obvious to one of ordinary skill in the art to apply teachings of Vogel to include performing such steps to more than one object because it would make the invention more effective and efficient producing repeatable results.

As per claim 6 Vogel as modified is directed to the first and second data objects are of different types (Vogel, column 3, lines 21-23)

As per claim 7 Vogel as modified is directed to the first and second sets of identifying parameters comprise different numbers of parameters (Vogel, column 2, lines 32-34, wherein "parameters" mean "phrases").

As per claim 8 Vogel as modified is directed to the first object is a sub-object of the second object and the second set of identifying parameters is a subset of the first plurality of identifying parameters (Vogel, column 2, lines 32-34, wherein "parameters" mean "phrases").

As per claim 9 Vogel as modified is directed to the first data object is contained in a text document, wherein the first plurality of identifying parameters includes at least one or more parameters indicating a location and name of the text document (Vogel, column 3, line 31);

and the second data object is contained in a database table, wherein the second plurality of identifying parameters includes at least one or more parameters indicating a location and name of the database table (Vogel, column 3, lines 10-14).

17. Claims 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vogel (US Patent 6,665,581) in view of Nakamura et al. (US 2003/0074375 A1).

As per claim 11 Vogel does not teach the mapping functions for each mapping are designed to map a different set of identifying parameters to columns in the index table.

Nakamura et al. does teach the mapping functions for each mapping are designed to map a different set of identifying parameters to columns in the index table (Nakamura et al., page 4, paragraph 0056, lines 14-15; Nakamura et al., page 6, paragraph 0097, lines 7-8, wherein the “parameters” mean “descriptors”).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Vogel with those of Nakamura et al. to include the assignment of parameters to column in a table because it would make retrieval of the parameters faster and easier.

As per claim 12 Vogel as modified still does not teach the mapping functions of at least one of the mappings maps more than one identifying parameter to a single column.

Nakamura et al. does teach the mapping functions of at least one of the mappings maps more than one identifying parameter to a single column (Nakamura et al., page 3, paragraph 0043, lines 10-13, wherein “titles of books” are assigned to the same column).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Vogel with those of Nakamura et al. to include



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mapping functions of at least one of the mappings maps more than one identifying parameter to a single column because it would make the invention more efficient.

As per claim 13 Vogel as modified still does not teach more than one identifying parameters are mapped to different sets of bytes in the single column.

Nakamura et al. does teach more than one identifying parameters are mapped to different sets of bytes in the single column (Nakamura et al., page 6, paragraph 0087, lines 24-29, wherein entry declared to be in bytes stored in database or memory).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Vogel with those of Nakamura et al. to include mapping parameters to different sets of bytes in a column because it would make the search and retrieval faster.

As per claim 14 Vogel as modified still does not teach at least one of the mappings comprises mapping functions for mapping parameters identifying data objects associated with a database to the index table columns;

and at least one of the mappings comprises mapping functions for mapping parameters identifying data objects associated with a text document to the index table columns.

Nakamura et al. does teach at least one of the mappings comprises mapping functions for mapping parameters identifying data objects associated with a database to the index table columns (Nakamura et al., page 4, paragraph 0056, lines 19-22);

and at least one of the mappings comprises mapping functions for mapping parameters identifying data objects associated with a text document to the index table columns (Nakamura et al., page 1, paragraph 0012, lines 120-21, wherein “text document” means “a file”; Nakamura et al., page 2, paragraph 0018).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Vogel with those of Nakamura et al. to include the mapping of parameters identifying objects associated with database or text document to the index table columns because knowing which columns to access depends on efficient the information was stored. This approach makes the use of index table easier to use.

As per claim 17 Vogel as modified still does not teach the mapping functions for each mapping are designed to map a different set of identifying parameters to columns in the index table.

Nakamura et al. does teach the mapping functions for each mapping are designed to map a different set of identifying parameters to columns in the index table (Nakamura et al., page 4, paragraph 0056, lines 14-15; Nakamura et al., page 6, paragraph 0097, lines 7-8, wherein the “parameters” mean “descriptors”).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Vogel with those of Nakamura et al. to include the assignment of parameters to column in a table because it would make retrieval of the parameters faster and easier.

As per claim 18 Vogel as modified still does not teach the mapping functions of at least one of the mappings maps more than one identifying parameter to a single column.

Nakamura et al. does teach the mapping functions of at least one of the mappings maps more than one identifying parameter to a single column (Nakamura et al., page 3, paragraph 0043, lines 10-13, wherein 'titles of books' are assigned to the same column).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Vogel with those of Nakamura et al. to include mapping functions of at least one of the mappings maps more than one identifying parameter to a single column because it would make the invention more efficient.

As per claim 19 Vogel as modified still does not teach more than one identifying parameters are mapped to different sets of bytes in the single column.

Nakamura et al. does teach more than one identifying parameters are mapped to different sets of bytes in the single column (Nakamura et al., page 6, paragraph 0087, lines 24-29, wherein entry declared to be in bytes stored in database or memory).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Vogel with those of Nakamura et al. to

include mapping parameters to different sets of bytes in a column because it would make the search and retrieval faster.

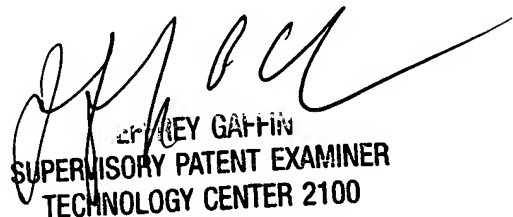
### ***Conclusion***

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tomasz Ponikiewski whose telephone number is (571)272-1721. The examiner can normally be reached on 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey A. Gaffin can be reached on (571)272-4146. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tomasz Ponikiewski  
March 6, 2006

  
JEFFREY GAFFIN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100